

UNCLASSIFIED

10th International Command and Control Research and Technology Symposium
The Future of C2

“Poly-Discipline Command and Transactional Command Authorities”

Topic: Policy

Mr. Samuel R. Oppelaar Jr.
CollaborX, Incorporated
1755 Telstar Drive, Suite 120
Colorado Springs, CO 80920

(719) 567-8825 (Office)
(719) 930-8487 (Cell)

sam.oppelaar.ctr@mda.mil

oppelaars@collaborx.com



Report Documentation Page			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE JUN 2005	2. REPORT TYPE	3. DATES COVERED 00-00-2005 to 00-00-2005		
4. TITLE AND SUBTITLE Poly-Discipline Command and Transactional Command Authorities			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) CollaborX Inc,1755 Telstar Drive Suite 120,Colorado Springs,CO,80920			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited				
13. SUPPLEMENTARY NOTES The original document contains color images.				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 47
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified		
19a. NAME OF RESPONSIBLE PERSON				

Abstract

This paper establishes and advocates a *disruptive innovation* in how we organize the instruments of National Power to conduct operations on the global arena. Recent conflicts in the Balkans, Afghanistan, and Iraq draw new pictures of conflict in the 21st Century with characteristics highly divergent from the wars of the mid 1900s. The contrast is defined by a drastic shift from the principles of previous conflicts where destroying the enemy included the leveling of cities and extensive collateral damage, to current day objectives of regime change, promotion of democratic governments, minimization of collateral damage, and preservation of innocent life. All of this is in the backdrop of smaller nation-states, often espousing radical fundamentalisms of some kind that generate terrorism. The concepts in this paper focus on the command aspect of how we organize forces (not just military forces) to prosecute conflict in tomorrow's world community. The proposed Poly-Discipline Command Structure (PDCS) integrates force packages from all instruments of National power into a seamless regional organization, lead by a person (military or civilian) who is granted "Transactional Command Authority" by the President of the United States.

Introduction

Nearly two years into the US occupation of Iraq following the decisive military victory over the forces of the Saddam Hussein regime, US forces have suffered over 1000 deaths of US service personnel at the hands of guerilla forces that are either hold-outs of the Hussein regime, foreign insurgents set on killing Americans, or terrorists tied to the notorious Al-Qaeda and the Abu Musab Zarqawi terrorist groups. The United States diplomatic organization and coalition forces in Iraq continue in their struggle to establish stability in the country, particularly in regions dominated by insurgents, operating in conflict with the recognized sovereign government of Iraq. The power vacuum created when the Hussein regime was removed from power has resulted in Iraq having few experienced political leaders who have the appropriate religious standing within the Sunni and Shiite Muslim sects, and few religious leaders who have political capabilities to cultivate and run the new government of Iraq.

This reality is symptomatic of the problems associated with conducting military operations. In other words, getting the military job done may not achieve the strategic end state that our national leaders envision. Current thinking about approaching warfare is essentially sequential. First we apply diplomatic and other non-military actions against the adversary, followed by or in conjunction with shaping of the battlespace, then we proceed with conducting military operations, and finally we attempt to transition the operations to civilian control to re-build and stabilize the defeated country. This arrangement lacks a level of simultaneity that is emerging in the national construct of conducting operations in a non-linear battle space. The break between military operations and transition to nation-building operations is simply too wide to breach with an acceptable level of continuity. This concept has not gone un-noticed by the Pentagon.

A recent Wall Street Journal report¹ describes Secretary Rumsfeld's draft directive to address the general lack of post-hostility planning in the Iraq conflict. The report states in part: "*In contrast to planning for the Iraq war, in which the Defense Department kept civilian agencies largely out of the process, the directive calls for the Pentagon to support the State Department's newly created Office of Stabilization and Reconstruction Operations. State Department officials are working separately to develop reconstruction teams that would work with the military.*" Later in this paper we'll address types of force packages provided to the PDCS that are non-military. The State Department team described above to work with the military is an excellent example of a "poly-discipline" force package.

The Defense Science Board, in its report to the Pentagon, promotes the concept of a bigger role for the State Department in planning operations with the goal of nation building after military operations.² The report calls "for better planning within the military for postwar operations...and dramatically greater involvement by the State Department... It also says nation-building efforts depend upon a "stronger partnership and working relationship" between Defense and State, which have had a rocky interaction while headed by Rumsfeld and Secretary of State Colin L. Powell." This analysis illustrates the overwhelming need for a new approach to planning for operations, with the end state of rebuilding the conflicted nation when the military component of operations is completed.

Nation-building capabilities "should become a major driver for the future force..."

This paper formulates a hypothetical construct (*please refer to figure 1 below*) for addressing how not only to integrate the various instruments of national power, but more importantly how to exploit the inherent synergy of those instruments before, during, and after military force is applied. The result of this continuum of synergistic operations will be a seamless application of "power" to conduct "operations", from pre-crisis to post-conflict establishment of a new peaceful government that will be a productive member of the global society.

PDCS HYPOTHESIS

"The organization, constitution, and employment of a Poly-Discipline Command Structure will enable the United States instruments of national power to conduct coherent operations resulting in a seamless and effective transition from pre-crisis through operations, to end-state completion."

Figure 1

¹ Wall Street Journal, October 25, 2004 ,Pg. 2, Pentagon's New War Planning To Stress Postconflict Stability

² Boston Globe Report, 5 Jan 05, Brian Bender, Globe Staff

Global Environment

Every day the global community changes. Over the years since World War II, we've seen nations emerge from war-torn and collapsed economies into world powers in industry, economics, science and technology advancement. National resolve of repressed societies has helped to propel countries previously governed by despotic regimes into thriving members of the world community of nations. Even impoverished nations whose lack of natural resources, stable governments, and intellectual capital seek a better standard of living for their peoples, often in the face of natural and man-imposed calamity. With the Information Age³ upon us, time and distance between people, governments, and international corporations and agencies has been reduced from days and hours, to near instantaneous connectivity through the global internet and other networks. This collapsing of distance through information has propelled the globalization of the world economy and has enabled the rapid transfer of knowledge, power, influence, and life-styles to literally every corner of the world in near real-time. This connectivity illustrates how the fabric of international affairs is becoming ever more tightly woven between nation-states, international organizations and agencies, economic interests, and social and religious groups. When 16th Century European explorers "discovered" foreign lands and peoples, modern day international commerce was commenced in earnest. The reach of England, Spain, Holland, and other nations served to connect by sea travel the people, goods, and resources of these far away lands. Each major advance in travel and communications has exponentially increased the propensity for expanded trade, sharing of societal standards, and life-styles. The intermediate culmination of this collapsing of time and distance is the proliferation of information age technologies worldwide. I call this an "intermediate" entity because we don't know yet what innovation will eventually replace the information age-centric construct. It's safe to say that we are just beginning to understand and exploit Information Age capabilities, not just in the military, but also within the entire world community construct. Isolated regimes, whose governments oppress the people's hunger for information and hunger for a better life and health, continue to resist the proliferation of information systems within their societies. We have seen, particularly in the case of China, that the government of China could not effectively stop the desire for a free and open economy, and access to the global network.

The global community is becoming more "connected" every day as network systems grow into all facets of society, industry, and governments. This rapid expansion is an axiom that will not go away, given the firm entrenchment of the supporting technologies. This fabric of world connectivity establishes the principle that economies, peoples, governments, and militaries form an integral, but variable power base in the nation-states within which they exist. This means that the days of Industrial Age⁴ linear warfare involving predominantly military force to defeat an adversary are over. Warfare,

³ Alberts, Dr. David S. and Hayes, Dr. Richard E., Power to the Edge, Command and Control Research Program (CCRP), Department of Defense, June 2003.

⁴ Alberts, Dr. David S. and Hayes, Dr. Richard E., Power to the Edge, Command and Control Research Program (CCRP), Department of Defense, June 2003.

more accurately described in 21st Century terms as “***operations***” must approach crisis resolution from every aspect of the poly-genetic⁵ fabric of power that exists in the global environment.

Nature of “Operations”

The closely interwoven fabric of societies within the global environment represents the interdependence of the nations that make up the global community, as well as our own national fabric of power. In conflicts of the past ten years or so we have seen the ascension of non-military elements of operations so dominantly, that they have reached beyond the threshold of “military operations” in their importance, effects, and outcomes. Just look at Iraq today and it becomes painfully clear that the societal issues of economics, health, security, basic human needs, and effective government have displaced the thrill of victory with the agony of transition operations that struggles daily to overcome a perplexing problem set. This disconnect is a direct result of the United States planning and executing military operations against Iraq with temporal and loosely coordinated actions of the broad national power base, and perhaps less involvement from non-government organizations. Extrapolation of this scenario leads us to future crises, conflicts, and calamity in an uncertain global security landscape, that may be evolving into an ever more asymmetrical presentation of force by nation-states and other non-state actors. Notwithstanding this characterization of the adversary, the fabric of power will exist at various levels in every one, and therefore will require the United States to address these events in terms of all the dimensions of national power that come together to achieve and create coherent effects relative to the adversary. There can be no doubt that the United States recognizes the deficiencies in planning and execution of Operation Iraqi Freedom. The wake of this military operation and the associated transition difficulties can be traced back to traditional military planning techniques used by USCENTCOM in preparing for this event.

"Late formation of DoD [Phase IV] organizations limited time available for the development of detailed plans and pre-deployment coordination," the report says. "Command relationships (and communication requirements) and responsibilities were not clearly defined for DoD organizations until shortly before [Operation Iraqi Freedom] commenced."

Figure 2

The extract above, quoted from the DoD report⁶, illustrates the need for effective planning for post-combat operations (Phase IV); but significantly, it only addresses DoD

⁵ Oppelaar, Samuel R. Jr., Synapse: Poly-Genetic Quantum Architecture for C2E, submitted to CCRP, 19 April 2004. [Poly-genetic means that the genesis for Synapse crosses into and connects every level of power in the agencies that must work together to defeat the 21st Century adversary]

⁶ "Operation Iraqi Freedom Strategic Lessons Learned", Washington Times, September 3, 2003.

organizations that would support the phase IV transition and makes no mention of the other sources of national power and support that would be critical to effecting not only transition, but moreover, the achievement of the desired effects from the outset of operations. Later in the report we see the following:

On planning for the post-Saddam period, the interagency process, such as between the Pentagon and State Department, "was not fully integrated prior to hostilities."

Before the war, "Phase IV objectives were identified but the scope of the effort required to continually refine operational plans for defeat of Iraqi military limited the focus on Phase IV."

Figure 3

Please note that this extract states, "The inter-agency process...was not fully integrated prior to hostilities." The remainder of this paper addresses this problem...how to organize and plan to conduct operations where the inter-agency process is fully integrated prior to hostilities. This paper postulates that future applications of national power to achieve and create desired effects against an adversary would be a cohesive and seamless application, or *corporate delivery of National Power Instruments*. The military will be just one component of this power structure. This application of power is termed ***Operations.***⁷ Future operations will be in pursuit of some defined "end state". How do we determine what the end state should be, and what are the essential components of that end state?

Describing the "End-State"

Military planning over the past 50 years has used a form of task decomposition⁸ that reflects industrial age thinking. For military operations we have employed a

⁷ "Operations" is defined in this paper to mean the combined and integrated application of all instruments of national power in a singular coordinated plan to achieve and create effects against an adversary. It differs significantly from "military operations" in that it includes not just military force, but other government and non-government entities in its planning, preparation, and execution from pre-crisis to post-transition stability.

⁸ Alberts and Hayes comment and describe decomposition as an Industrial-Age "divide and conquer" mentality: "Military organizations that developed during the Industrial Age also reflect the Industrial Age principle of decomposition. For example, the historical military staff functions (personnel, intelligence, operations, logistics, etc.) allow a commander to maintain a coherent grasp of the battlespace while the staff sections monitor, understand, report about, plan for, and implement functional activities within their areas of competence. Similarly, the practices of separating combat into land, sea, and air (and space), assigning physical areas of responsibility (AOR) to particular military organizations, and having different organizations responsible for fires and maneuver are other examples of decomposing warfare into manageable pieces.... Even the command role is carved out of the overall military problem as a separate activity."

strategy-to-task model that decomposes the National Security Objectives into National Military Objectives, then Strategic Military Objectives, then to Operational Objectives, Tactical Objectives, and finally Tactical Tasks. This structured decomposition effectively separates the application of military power in increasing doses with each decomposed level of objectives from the other instruments of national power fabric. Planning at each level then increases its focus on the military instrument until planning at the tactical task level (destroy this bridge with an F-16) is devoid of coherent application of all other supporting power bases. Does this mean we want the fighter pilot to worry about how the state department is engaging with the affected nations? Perhaps not, but this shows how quickly the desired end-state can transcend from achieving and creating a particular outcome, to simply destroying a target. While the United States may enter into armed conflict with an adversary of the future, the global environment we discussed earlier will play a significant part of determining the desired end-state. In order to understand the dimensions of this problem set, we need to examine how we determine what the end-state should be.

We have already identified some of these components as government, adversary forces, societal conditions, health and welfare of the citizenry, and economic conditions. All too often military leaders decompose the desired end-state into terms that reflect the strategy to task model. The end result being a description of how we will overcome the adversary forces in order to defeat a despotic regime. This paper suggests that the decomposition of objectives technique has outlived its 20th century genesis and is flawed in the face of the Information Age globally connected battlespace. We must now describe our end-states to include plans for addressing all the foreseen and perhaps unforeseen problems that will undoubtedly emerge following **operations**. Our end-states must be fully articulated in advance and be more detailed than saying to the adversary citizenry that we “will free you from your current regime and make life better for you”. We need to articulate in as finite detail as possible what we expect to happen following **operations** in every area of the adversary’s power fabric. Not only should we state that we want to replace a regime, but we also need to state what will go into its place, how we intend to solve economic insolvency, how we intend to provide food, medical support, sanitation, security, infrastructure repair, and civil administration of essential services for the people. These are hardly the nuts and bolts of our nation’s military, and looking objectively at these issues (not all inclusive for the purposes of this paper) shows us that “last minute” ad-hoc planning for these criticalities will not meet the challenges these issues present. Once the detailed end-state is fully articulated, it will serve, as a guide to the development of **operational planning** that will involve a broad spectrum of power both inside and outside the United States government. How do we approach this complex planning problem set?

Planning and Enabling Globally Oriented Operations

So far we have established in context that operations against future adversaries will be conducted through the fully integrated application of power by all elements of national and global power sources. Military forces of the United States and our allies will provide the backbone of striking force when and where it’s needed, but unlike conflicts of the Industrial Age, future operations will feature this striking power as part of the

overall application of the fabric of national power. Up through present day, actions against an adversary, when the decision to use military force is made, are planned by the Regional Combatant Commander (RCC) with guidance, direction, and advice of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, the National Security Advisor, and the President of the United States. In theory, these senior national leaders serve as the coordinating authority of all other government organizations, while maintaining some level of liaison with non-government organizations. When planning military operations in the classic sense though, representatives of some of the departments of the US government may be present at the combatant command headquarters, either in person or virtually, but to a large extent function as liaisons to their assigned agency. The RCC then undertakes planning a military operation to achieve a set of strategic objectives (note: strategic objectives in the military sense do not equate to the descriptive end-states discussed earlier). The focus of the RCC is on defeating the adversary's military forces to enable our national will to be imposed on the adversary government. Emerging concepts of harnessing *inter-agency* power bases, such as the *Distributed, Collaborative, Global Operations Center (DCGOC)*, and the *Joint Inter-Agency Control Group (JIACG)* are both excellent efforts designed to further exploit other instruments of national power in the conduct of military operations⁹. These entities however, function outside Title 10 authority and can only serve in a coordinating role relative to the military operation being planned. Consequently, to plan globally oriented **operations** that are focused on an adversary, the planning authority needs to have congressionally mandated authority to commit resources. In effect, the objective is to push the power of interagency planning and force application down to the strategic and operational levels where they can best be exploited. "Globally oriented operations" says that actions taken in one area of the globe have intrinsic impact on a spectrum of world affairs including political, economic, business and commerce, health, and state security. Moreover, taking military action against any adversary absent the full compliment of national, international, and private organizational construct will impact the global landscape to an even greater extent. Planning then to conduct **operations** that will have some level of global impact, must start with and follow through to the end-state seamlessly, with a coherent application of resources and power. In order to inculcate the necessary trans-discipline power elements into operational planning and execution, we'll need to adjust how we think about organizing the national power elements to conduct operations. What's needed to effectively produce this level of coherence in the application of power is an organizational theme that shatters traditional departmental stovepipes and operates as though we are "actually all on one team".

Main Theme: Poly-Discipline Command Structure

The theme of this paper represents a *disruptive innovation* in organizational construct for the application of power against an uncertain adversary extant within the global environment. Admiral Arthur K. Cebrowski, Director of the Office of Force

⁹ These concepts have been the subject of experimentation and concept development at USJFCOM/J9, in Suffolk, VA. 2002-2003.

Transformation, recognizes the need for innovative thinking to allow organizations, such as described herein, to co-evolve with the supporting technology.¹⁰

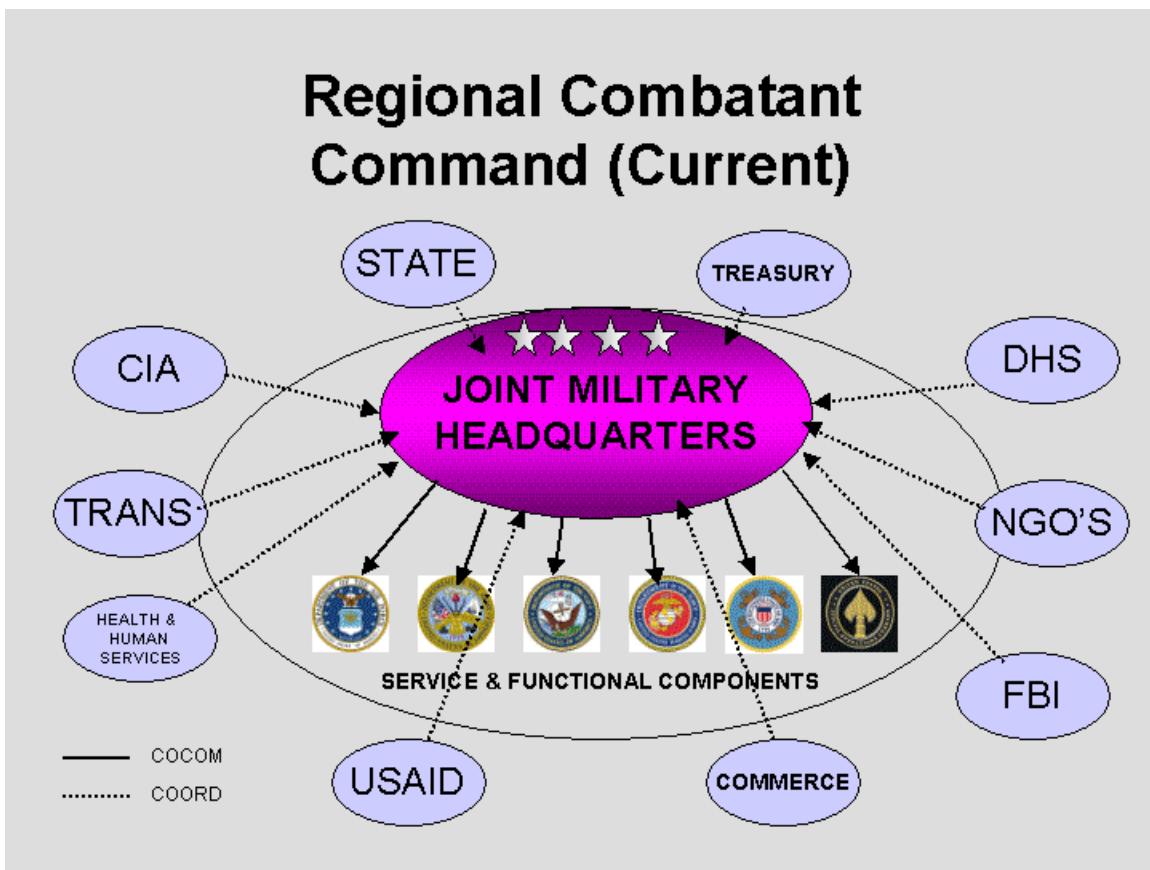
When we talk about transforming our defense capability, we're talking about the co-evolution of technology concepts and organizations to achieve a broadened capability base. Evolving organizations—people—to think and act differently is a real and a new challenge. But our people must change so that new technology concepts can be viewed from the perspective of how these capabilities best fit achieving sustained competitive advantage on the battlefield.

We'll start the description of the Poly-Discipline Command Structure (PDCS) by reviewing what it must be able to accomplish. First, the PDCS needs to have the authority to commit resources across the many agencies, power structures, and organizations that constitute our national power. It also needs to be able to establish a coherent plan to achieve the desired end-states as described previously above. Next, the PDCS will need to operate as a single focused team with the full force of military power as its predominant intimidator and deterrent enforcer. And finally, the PDCS will need direct, collaborative, and intransigent connectivity at appropriate levels with each of the parent supporting organizations, agencies, and power sources within and outside the government.

With these criterion established what then does the PDCS look like? The graphic below¹¹ in figure 4 depicts how our current regional combatant command might look in preparation for conduct of military operations.

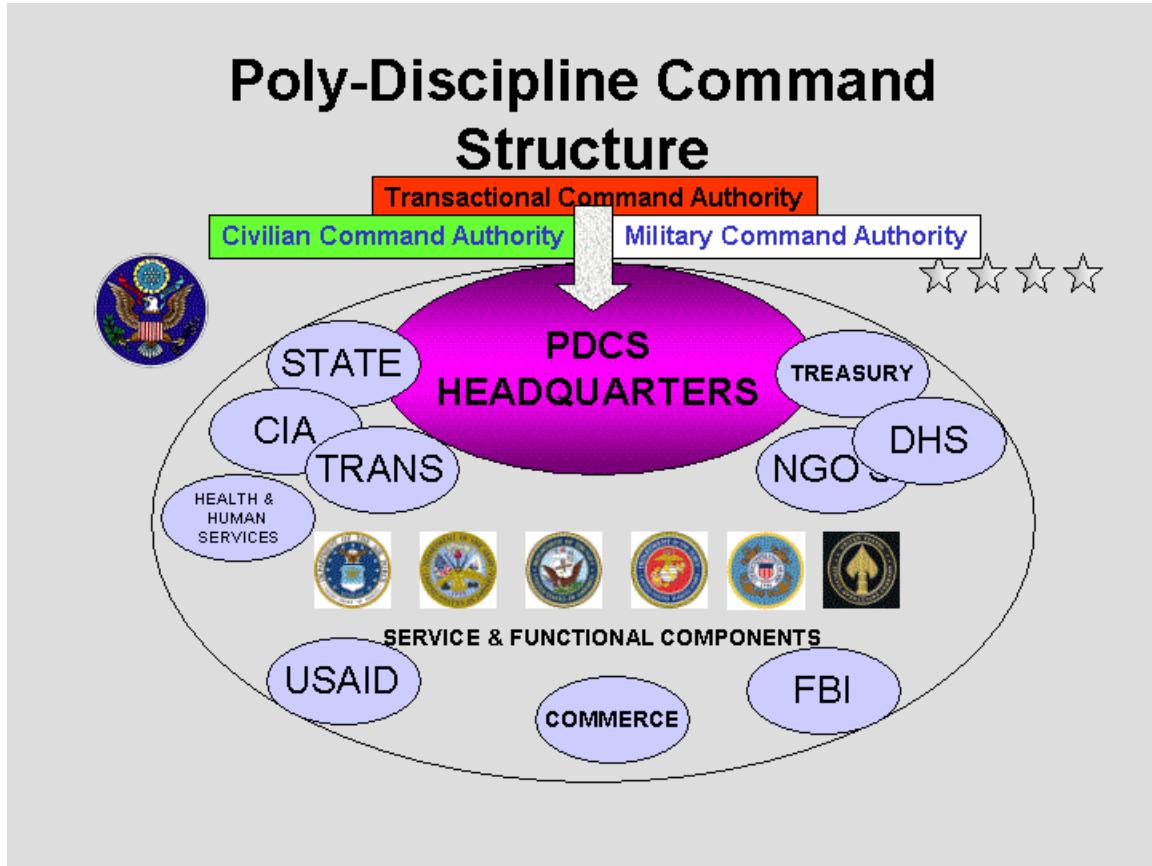
¹⁰ Defense AT&L, March-April 2004, Pg. 2 Interview With Arthur K. Cebrowski

¹¹ The Regional Combatant Command (RCC) structure of today as depicted is illustrative only and may not necessarily show all component entities.

**Figure 4**

The PDCS, in contrast to the above depiction, is based on the concept of “front-loading” all the essential capabilities needed to establish and maintain a transitional civilian administration in a post-operations nation. In other words, the total force of military, inter-agency, and supporting organizations is developed and constituted well in advance, established pre-crisis, to routinely operate as a synergistic unified entity in initial planning, collaborative coordination, preparation, and execution of “operations” (as previously described). The command structure would be constructed in such a way that the instruments of national power are resident within the command structure at the outset. This is a new way of thinking about organizing the elements of national power into a single operational entity, wherein the regional operating force is not just military, but a “poly-discipline” organization that is well suited to plan and apply power from the emergence of crisis to culmination of transition of power to the successor government’s control...seamlessly.

PDCS creates a Regional Command consisting of empowered representatives of government (and non-government) sources of power under the authority granted by the US Congress, to conduct **operations**. This regional command authority would be fully constituted and authorized to conduct operations in pursuit of achieving coherent effects from start to end-state, employing internal transitions and focus of national power instruments according to the operational situation (military, diplomatic, economic, civil, etc.) The graphic below at figure 5 illustrates what the PDCS could look like.

**Figure 5**

Once formed, the PDCS would be assigned forces and capabilities from all components (disciplines) to plan and execute operations. Unity of command is maintained by the President of the United States, through the appointed Civilian or Military Command Authority holding “Transactional Command Authority” over a Poly-Discipline Command. The Poly-Discipline Command would function under Presidential direction and authority. Non-government and international agencies would be invited to participate to the extent possible. This arrangement has the potential to not only develop a coherent application power from multiple sources to create and achieve desired effects, but will also be able to fully integrate transition/stability operations at the “front” of an operation, rather than the government attempting to orchestrate these aspects during or immediately following military action. The senior US civilian member of the PDCS would be a person appointed by the President of the United States, who would transition into the former adversary country as the civilian transitional administrator (such as Mr. L. Paul Bremmer), at an appropriate point during operations. Prior to that transition, this senior civilian would function as a counterpart to the military combatant commander along with an appropriate representation from the inter-agency fabric, which has provided the equivalent of “tailored force capability packages” to the regional command. This structure of national power, designed to address global issues, will be formed to plan, prepare for, and execute a coherent application of national power against an adversary,

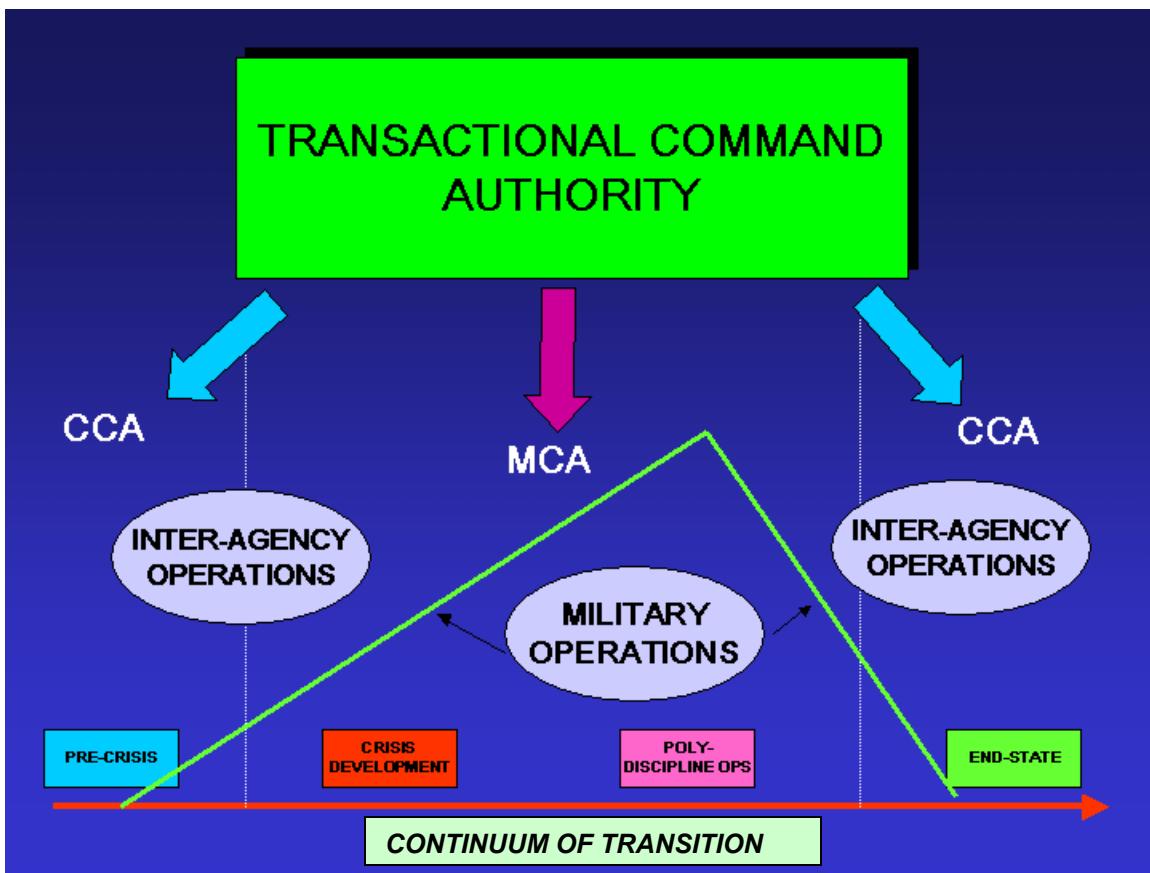
with the express purpose of achieving a desired end-state through creating coherent effects in the global battlespace.

The PDCS command arrangement calls for a new understanding of command authorities. Traditional military command authorities (Combatant Command [COCOM], Operational Control [OPCON], and Tactical Control [TACON]) in no way account for an arrangement defined in the PDCS construct. The enactment of federal legislation would be needed to create the PDCS system. This legislation must also include the new command relationships needed for PDCS to operate.

These new relationships and designations reflect the core of responsibility for conducting operations across a **continuum of transition**. The continuum timeline describes movement from pre-crisis through some level of conflict (which may be political, diplomatic, economic, military), to accomplishment of some defined end-state. Along this continuum, varying amounts and types of national power elements are applied to a situation, event, crisis, or conflict. Given that the military is but one component of the total national power package, it is logical to conclude that the military would not be “in command” during all periods along the continuum. The person who is “in command” would exercise a new form of command over instruments of national power capabilities packages and forces. This command authority is called **“Transactional Command Authority” (TCA)**. [See Appendix] The President assigns TCA to one of two individuals along the continuum. Prior to crisis, the senior civilian PDCS counterpart would have TCA over all national power packages made available to the PDCS. As a crisis develops and the use of force is ordered¹², the President passes TCA to the military commander. The military commander always maintains **“Military Command Authority” (MCA)** over all military forces even when the **“Civilian Command Authority” (CCA)** holds the higher level TCA. As a crisis develops, TCA is passed to the military commander to plan and execute military operations, with the CCA functioning in direct support. The military commander maintains TCA until significant military operations are completed or at such time as is appropriate for the CCA to assume TCA. Once the President transfers TCA to the CCA, the MCA is in direct support of the CCA to assist in security, force stabilization and post-conflict support to the Poly-Discipline force. Please see figure 6 below for a graphic depiction of the arrangement of command authorities.¹³

¹² Use of force may be ordered as part of the entire “regional plan” for the crisis.

¹³ This graphic illustrates the relative magnitude of elements of the Poly-Discipline force along the continuum of operations. As the military component assumes the central weight of effort (in the center of the continuum, the MCA has Transactional Command Authority).

**Figure 6**

The Future of Conducting Poly-Discipline Operations

The PDCS, as presented in this paper is a disruptively innovative arrangement of the instruments of national power that together, can achieve an end-state defined by our national leaders. The global security environment remains the single most threatening condition to affect the global community. Past wars fought between two or more nations tended to be isolated in varying degrees by space and time. That space and time has now been reduced to seconds with ever more capable networks and systems that link every corner of the world. The PDCS is designed to be responsive to all levels of crisis, from the most innocuous humanitarian relief operation, to the most severe full-scale *weapons of mass effect* warfare. Capabilities across the spectrum of national power will perhaps, in varying amounts, be essential to all these. In future operations, the PDCS will be able to conduct integrated planning and execution at a level of fidelity not possible with the current organizational construct. The PDCS will operate as an integrated planning, preparation, and execution entity, using collaborative tools in a distributed information environment, along with inter-agency discipline force packages assigned to the command. As planning is developed and approaches completion, to include appropriate coordinated actions of the military, government agencies, and supported by non-government organization representation, the entire **Regional Operations Plan** is coordinated with the Joint Chiefs of Staff (JCS), the Departments, and the Executive Branch. When the President orders operational execution, the PDCS conducts the

integrated operation with full visibility into the complex aspects of the operation. When operations with a “military force” component reach intermediate and culminating objectives, all other agency components engage their specific element of national power in concert with the military force component to enable a smooth transition from military force operations to an integrated civilian interim authority led by the command’s senior civilian administrator, or another designated civilian administrator. The operation continues through stabilization of the former adversary until an appropriate new host government can assume responsibility for self-governance, security, economic viability, and diplomatic status.

The PDCS is a totally new thought construct for describing how the instruments of national power are organized to apply power in an uncertain security environment. The beauty of the PDCS is found in its design flexibility to handle crises of varying dimensions wherever and whenever they emerge and threaten the security of the United States and our national security interests around the world. The extract below at figure 7 foreshadows operations in the future. The last line tells us what has to get done, and the PDCS described in this paper provides a structure and method to accomplish it.¹⁴

The future joint force will operate in an uncertain and complex threat environment, it adds. To do so, the force will need to “leverage knowledge-based warfare, rapidity in decision-making and execution and a culture dedicated to creating and exploiting opportunities,” the draft states. Moreover, success at the operational level will depend on the **“coherent application of joint, interagency and coalition power to achieve unity of purpose and action.”**

Figure 7

Summary and Capture

The uncertain security environment of the 21st century will be marked by state and non-state actors exporting various forms of terror, harm, force, and despotic behavior against the peace-loving members of the global community. Such crises, when they emerge will need to be dealt with swiftly and effectively across a broad spectrum of issues that are extant in a hyper-connected global *infospace* and battlespace. Applying all instruments of National Power to solve these crises will be critical to achieving our national security goals. The Poly-Discipline Command Structure represents a new construct for organizing our national power fabric to execute coordinated planning, integrated operations, and seamless transition to post-military force in areas of the world where criminal and self-serving regimes threaten world peace and freedom.

¹⁴ Extracted from “Inside the Pentagon”, 31 July 2003, Pentagon Officials Draft Joint Operating Concepts For Future Missions, Keith J. Costa, (Reference to US Joint Forces Command (USJFCOM) developmental future operational concepts)

Innovations in This Paper

- Poly-Discipline Command Structure Concept
- Warfare described in terms of National Power “operations” rather than military operations
- Command Authorities
 - Transactional Command Authority (Presidential assignment)
 - Civilian Command Authority
 - Military Command Authority
- Continuum of Transition (Operations)
- Regional Operations Plan¹⁵
- Poly-Discipline Force Packages (Included all instruments of national power)

¹⁵ The Regional Operations Plan is a next generation version of the current OPLAN format that goes beyond the traditional structure of a particular military mission or response to a regional crisis. Legacy courses of action for military operations are complemented and integrated with courses of action elements from all assigned poly-discipline force packages and capabilities made available to the Regional Transactional Command Authority.

APPENDIX

Command Authorities:

Transactional Command Authority:

TCA describes the authority of the senior United States military or civilian official designated by the President to exercise command over all US instruments of national power made available to the Regional Command. TCA grants planning, coordinating, and operational authority to exercise and employ instruments of national power in the form of Poly-Discipline Force Packages assigned to the regional command. TCA is transitory and will be assigned to either the Military Command Authority (MCA) or Civilian Command Authority (CCA) according to the geo-political and military situation. In general terms, TCA would rest with the CCA in peacetime and be assigned to the MCA as crisis develops and military intervention is needed.

Military Command Authority:

MCA describes the authority of the regional military commander to organize and employ joint military forces assigned to the regional command to conduct and support operations. The regional military commander maintains MCA. MCA is the authority granted by law to conduct military operations as directed by the President. Assumes Transactional Command Authority by direction of the President.

Civilian Command Authority:

CCA describes the authority of the regional civilian counterpart of the military commander to plan, organize, and apply all non-military instruments of national power made available to the regional command in the form of poly-discipline force packages. The civilian command authority maintains command authority over all non-military force capabilities assigned to the regional command. Assumes Transactional Command Authority by direction of the President.

UNCLASSIFIED

About the Author: Mr. Oppelaar retired from the USAF with over 23 years of experience in command and control, having commanded and operated ground radars, AWACS, JSTARS, Aerospace Operations Centers, and NORAD systems. He is a recognized expert in Aerospace Operations Centers and has been a lead instructor at the USAF's Joint Command and Control Warrior Advanced Course at Hurlburt Field, FL. Mr. Oppelaar is presently designing operational procedures for the Ballistic Missile Defense System's Technical Support Center and the Missile Defense Agency's Safety Function. His previous work on Synaptic Quantum Architectures and advanced C2 theory has been published by the DoD Command and Control Research Program (CCRP), Washington, DC.

Disclaimer: The concepts and analyses contained in this paper are solely those of the author and not the official position of CollaborX, Inc., or any entity of the United States Government.



UNCLASSIFIED

THIS PAGE IS INTENTIONALLY BLANK



*Bringing People, Processes
and Technology Together*

“Poly-Discipline Command and Transactional Command Authorities”

Mr. Samuel R. Oppelaar Jr.
CollaborX, Incorporated
1755 Telstar Drive, Suite 120
Colorado Springs, CO 80920

(719) 567-8825 (Office)
(719) 930-8487 (Cell)

sam.oppelaar.ctr@mda.mil
oppelaars@collaborx.com

Disclaimer: The concepts and analyses contained in this paper are solely those of the author and not the official position of CollaborX, Inc., nor any entity of the United States Government.

Poly-Discipline Command & Transactional Command Authority

Purpose

Describe a “disruptive innovation” for organizing the Instruments of National Power to conduct “operations” across the global arena by:

- Introducing a new command structure
- Re-defining the context and meaning of “operations”
- Establishing a new paradigm of command authorities

Poly-Discipline Command & Transactional Command Authority

Presentation Overview

- Problem Statement
- Background & Hypothesis
- The Global Environment
- Nature of “Operations”
- Describing the “End State”
- Planning & Enabling Globally-Oriented Operations
- Main Theme: Poly-Discipline Command Structure
- Future of Conducting Poly-Discipline Operations
- Summary: PDCS Pathway
- Way Ahead

UNCLASSIFIED



Poly-Discipline Command & Transactional Command Authority

Problem Statement

The reality of 21st Century conflicts, that are characterized by insurgencies, asymmetric threats, terrorism, and radical fundamentalism, requires a new conceptual foundation upon which the United States can apply the instruments of National Power to produce lasting coherent effects in the battle space

Background and Hypothesis

- Struggle for stability in Iraq
- 20th Century sequential application of Instruments of National Power (INP)
- The breach too wide...military operations-transition-nation building
- Defense Science Board Report
 - We need better planning within DoD for post-war
 - We need a stronger partnership between DoD & State
- Overwhelming need for new approach to planning for “operations” with end-state of rebuilding the conflicted nation after military action is completed
- How can we exploit inherent synergy of INP before, during, and after military force is applied?

Background and Hypothesis

Poly-Discipline Command Structure Hypothesis

“The organization, constitution, and employment of a Poly-Discipline Command Structure (PDCS) will enable the United States INP to conduct coherent *operations* resulting in a seamless and effective transition from pre-crisis through operations, to end-state completion”

UNCLASSIFIED



The Global Environment

- ❑ **Global Community...a state of change**
 - Historical transformation of war-torn nations (Germany, Bosnia, Japan)
 - National resolve of people to be free of despotism
 - Collapsing distance and time with technological advances
 - Globalization of economies, lifestyles, power, influence
- ❑ **Growth of Connectivity in the Global Community**
 - Affects all aspects of societal progress, industry, and governments
 - Axiomatic...growth firmly entrenched
 - Results in principle that peoples, governments, economies, and militaries form an integral and variable power base in each state
- ❑ The 21st Century global fabric means the days of force-centric linear warfare are all but over
- ❑ 21st Century conflict more accurately described as “Operations” that accounts for the “Poly-Genetic” fabric of power in the global environment

The Nature of “Operations”

□ **Context of “Operations”**

- Closely interwoven fabric of societies and interdependence of nation-states
- Recent conflicts: rise of non-military elements of operations to dominance beyond threshold of military operations
- Iraq: Societal issues of economics, health, security, basic human needs and effective government...challenges in transition process
- Future Crises: uncertain global security landscape, evolving asymmetrical presentation of force
- Fabric of Power exists at various levels: requires US to address all dimensions of national power to achieve and create coherent effects

“Late formation of DoD (Phase IV) organizations limited time available for the development of detailed plans and pre-deployment coordination...”

“Command relationships (and communications requirements) and responsibilities were not clearly defined for DoD organizations until shortly before Operation Iraqi Freedom commenced”

(Operation Iraqi Freedom, Strategic Lessons Learned, Sep 03)

The Nature of “Operations”

- ❑ **Inter-Agency Process**
 - Not fully integrated prior to hostilities
 - Military operations' focus on Phase IV limited

“On planning for the post-Saddam period, the interagency process, such as between the Pentagon and State Department, “was not fully integrated prior to hostilities.” Before the war, “Phase IV objectives were identified but the scope of the effort required to continually refine operational plans for defeat of Iraqi Military, limited the focus on Phase IV.”

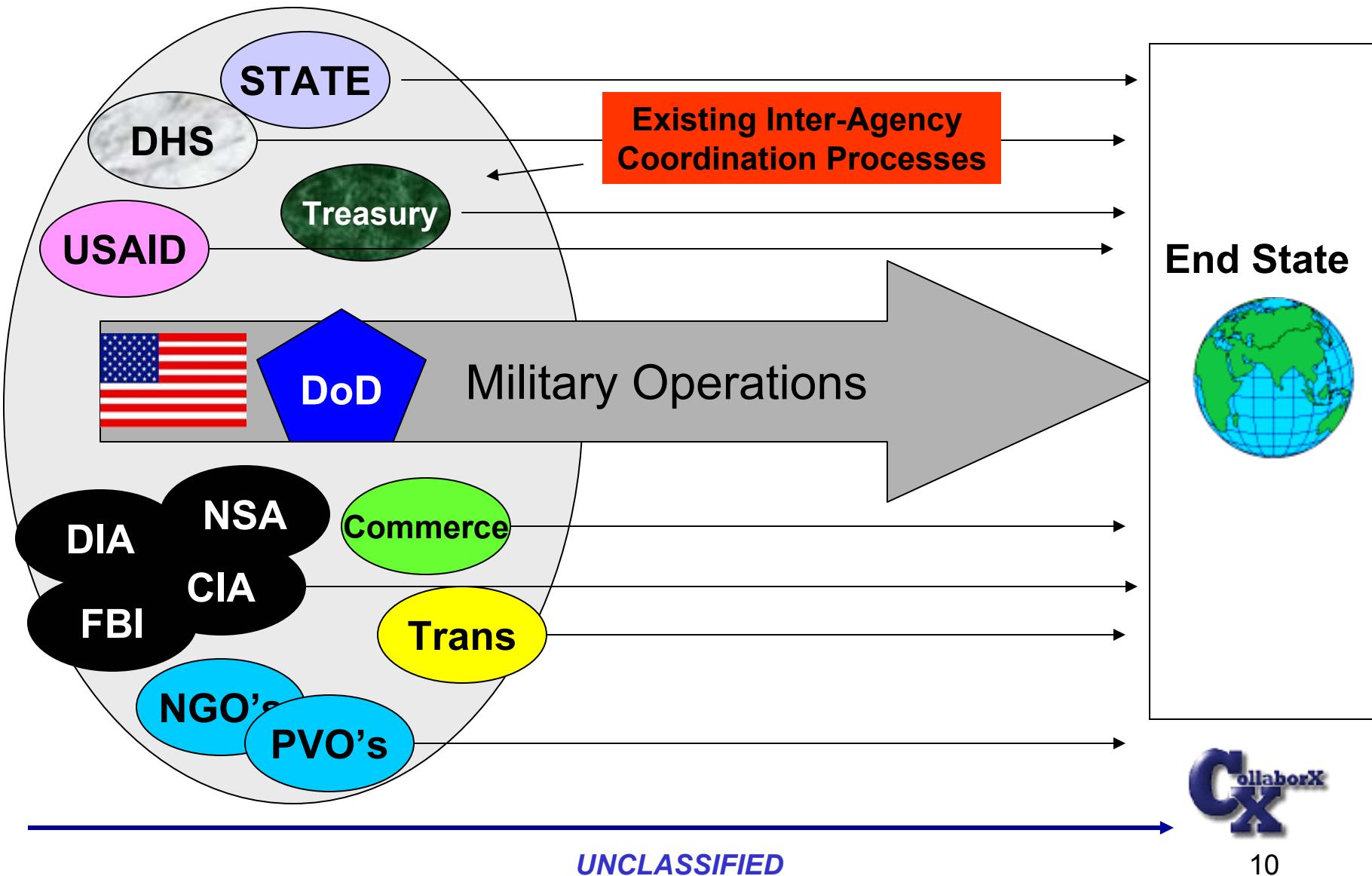
(Operation Iraqi Freedom, Strategic Lessons Learned, Sep 03)

- ❑ Our objective then is to: organize and plan to conduct operations where the inter-agency process is fully integrated prior to hostilities
- ❑ We need a seamless application and corporate delivery of Instruments of National Power

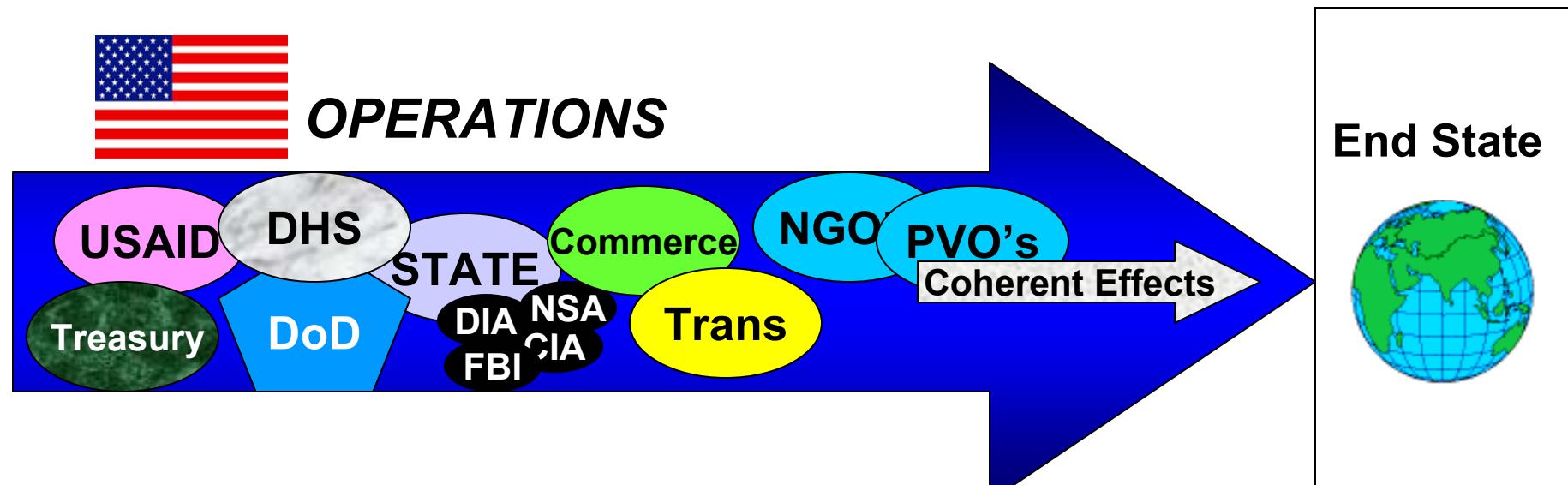
Let's Redefine “Operations”

UNCLASSIFIED

Current: Instruments of National Power Working in Loose Confederation Toward an “End State”



Redefined “Operations”: Instruments of National Power Working Together Toward an “End State”



Combined and integrated application of all instruments of National Power in a singular coordinated plan to achieve and create effects against an adversary. Includes not just military force, but other government and non-government entities in planning, preparation, and execution from pre-crisis to post-transition stability.

Let's Describe the "End State"

UNCLASSIFIED

Describing the “End State”

- ❑ Legacy task de-composition & Strategy-to-Task Model
 - Effectively separates application of military power in increasing doses at each lower level
 - De-composition of objectives drives toward military-centric solution
- ❑ Model is growing obsolete in the Information-Age Battlespace
- ❑ End-State must now be described in terms of globally connected environment
- ❑ Must be fully articulated in advance...not “ad-hoc” or after-thought
- ❑ “Operations” must address entire power fabric of target nation
- ❑ Military instrument alone is insufficient to address all components of the power fabric
- ❑ Requires new organizational concepts to accomplish



Planning and Enabling Globally Oriented Operations

- ❑ “Operations” against future adversaries will be conducted through a fully integrated application of National Power fabric
- ❑ Military instrument is only one component
- ❑ Focus of Regional Combatant Commanders (RCC) is on combat operations
- ❑ RCC’s have inter-agency presence, primarily as liaisons from home agencies (operating outside Title 10 authority)
- ❑ To conduct “Operations”, we’ll need Congressionally-mandated authority to plan and commit resources
- ❑ Objective: push power of interagency planning to strategic and operational levels for best exploitation of synergy
- ❑ Globally-Oriented Operations: actions taken in one AOR have intrinsic impact on the spectrum of world affairs (Pol, Economic, Business, Commerce, Health & Welfare, State Security)
- ❑ Must start with and follow through to the “End State”, seamlessly with a coherent application of poly-discipline power

How do we do it?....PDCS

UNCLASSIFIED



Main Theme: Poly-Discipline Command Structure

□ What must PDCS accomplish?

- Provide authority to commit resources across agencies, power structures, and organizations that constitute national power fabric
- Establish a coherent plan to define and achieve the “end-state”
- Operate as a single focused team with full force of military component as the predominant coercer and deterrent enforcer
- Have direct, collaborative, and uninterrupted connectivity at the appropriate levels within the parent entities

Main Theme: Poly-Discipline Command Structure

□ PDCS Characteristics

- Based on “front-loading” essential capabilities to establish and maintain a transitional administration post-“operations”
- Total force of Military, Inter-Agency, and supporting organizations constituted well in advance of crisis or intervention
- Routinely operates as a synergistic unified entity for planning, collaborative coordination, preparation, and execution of operations
- Command Structure constructed with all INP resident within command structure at the outset
- Regional Operating Force is not just military...but a “Poly-Discipline” organization well suited to apply power across the continuum of transition (Pre-crisis, crisis, conflict, reconstitution)

Main Theme: Poly-Discipline Command Structure

PDCS Actions

- Creates a “Regional Command” of government and non-government power sources
- Operates with Congressional mandate to conduct “Operations”
- Applies “Poly-Discipline” power to achieve coherent effects from start to end state
- Employs internal transitions of INP focus in response to operational situation
- Executes operations under POTUS authority
- Consists of “Force Packages” from all Poly-Discipline components
- Goal is to fully integrate transition/stability operations at the “front end” of an operation

PDCS Leadership

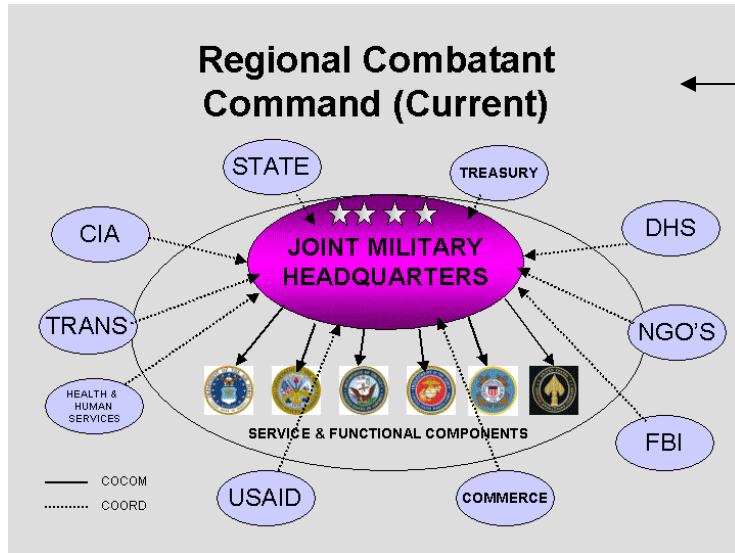
- Civilian Command Authority appointed by POTUS, confirmed by US Senate
- Military Command Authority equivalent to Regional Combatant Commander

PDCS Graphic

UNCLASSIFIED

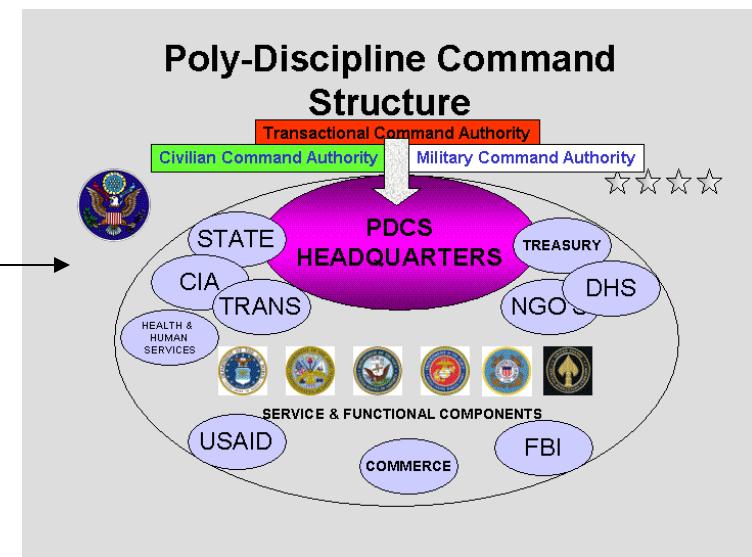


Poly-Discipline Command Structure



Depiction of existing RCC Structure

- Military Centric
- Other agencies outside the circle



PDGS

- Uses Transactional Command Authority
- All elements of power fabric are inside the circle
- Produces Regional Operations Plan
- Executes “Operations” as a single team

UNCLASSIFIED



Transactional Command Authorities

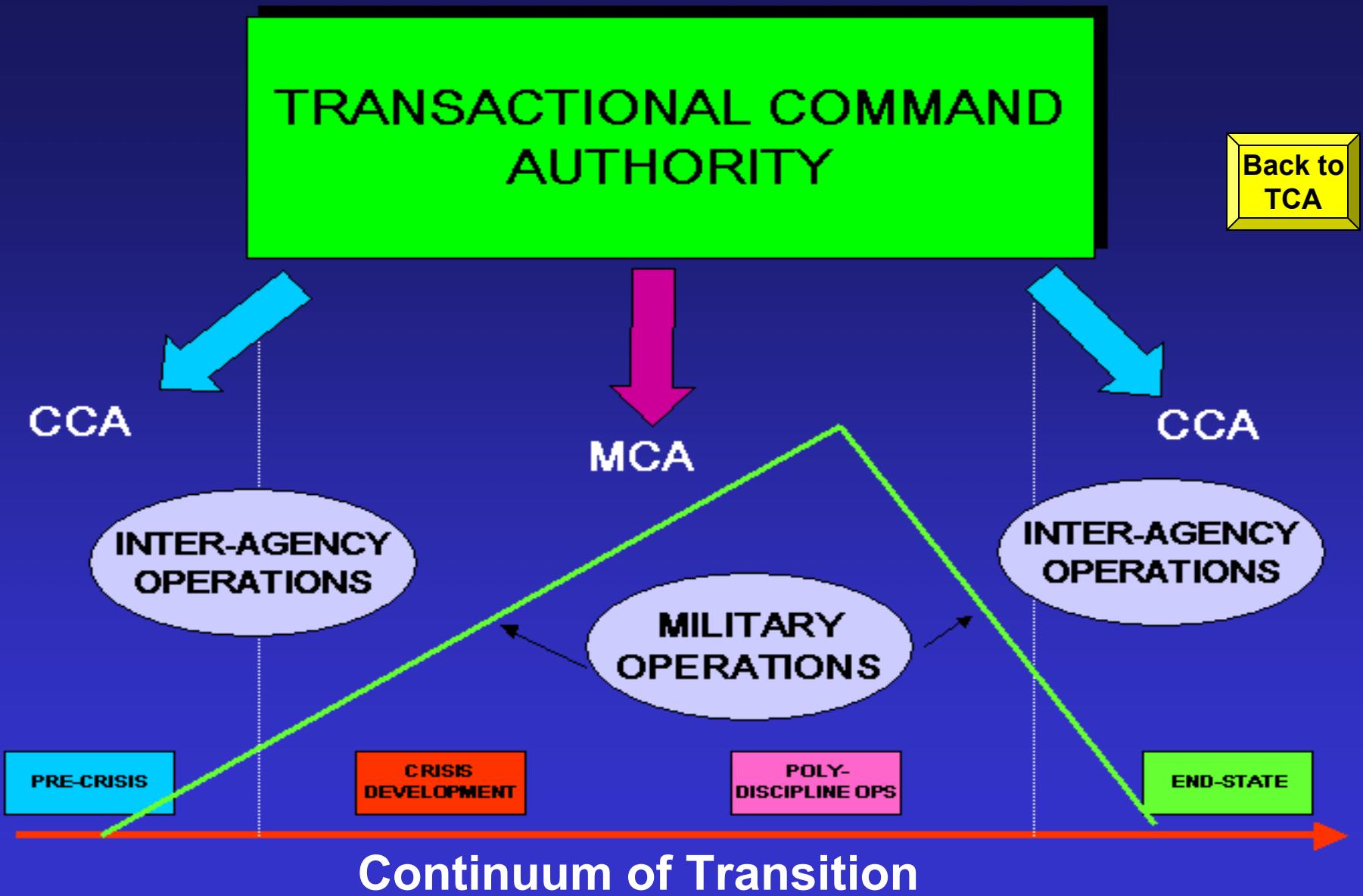
PDCS Command Arrangement

- New understanding of command authorities: Different from traditional COCOM, OPCON, TACON
- PDCS requires enacting legislation
- New command relationships and designations reflect the core of operational responsibility across a continuum of transition
 - Either the Civilian Command Authority (CCA), or
 - The Military Command Authority (MCA) will be vested with:
 - TRANSACTIONAL COMMAND AUTHORITY (TCA)



- TCA is granted and directed by POTUS
- TCA exercises command and control over entire Regional Command
- TCA passes to the MCA when military force is applied
- TCA passes back to CCA upon completion of military force
- (TCA is related to “supporting/supported” command relationships)

Transactional Command Authorities



Future of Conducting Poly-Discipline Operations

Past Wars: isolated in varying degrees by Space and Time

PDCS responsive to all levels of crisis

PDCS will operate as a single entity with high level of fidelity

PDCS will produce a Regional Operations Plan

PDCS is a totally new thought construct

Now reduced to seconds

Full spectrum of operations

Integrated planning and execution using Collaborative tools in a distributed information environment

Addresses all poly-discipline applications of power...synergistically...up front

Organized to apply INP in an uncertain security environment in a more coherent and fully integrated effort

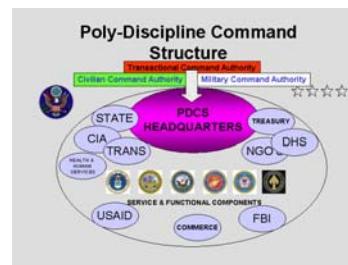
Future of Conducting Poly-Discipline Operations

This extract from *Inside the Pentagon* refers to JFCOM development of Future Operational Concepts. It foreshadows “operations” of future, and The last line tells us what has to get done.

The future joint force will operate in an uncertain and complex threat environment...to do so, the force will need to “leverage knowledge-based warfare, rapidity in decision-making and execution, and a culture dedicated to creating and exploiting opportunities”...Moreover, success at the operational level will depend on the “coherent application of joint, interagency and coalition power to achieve unity of purpose and action”

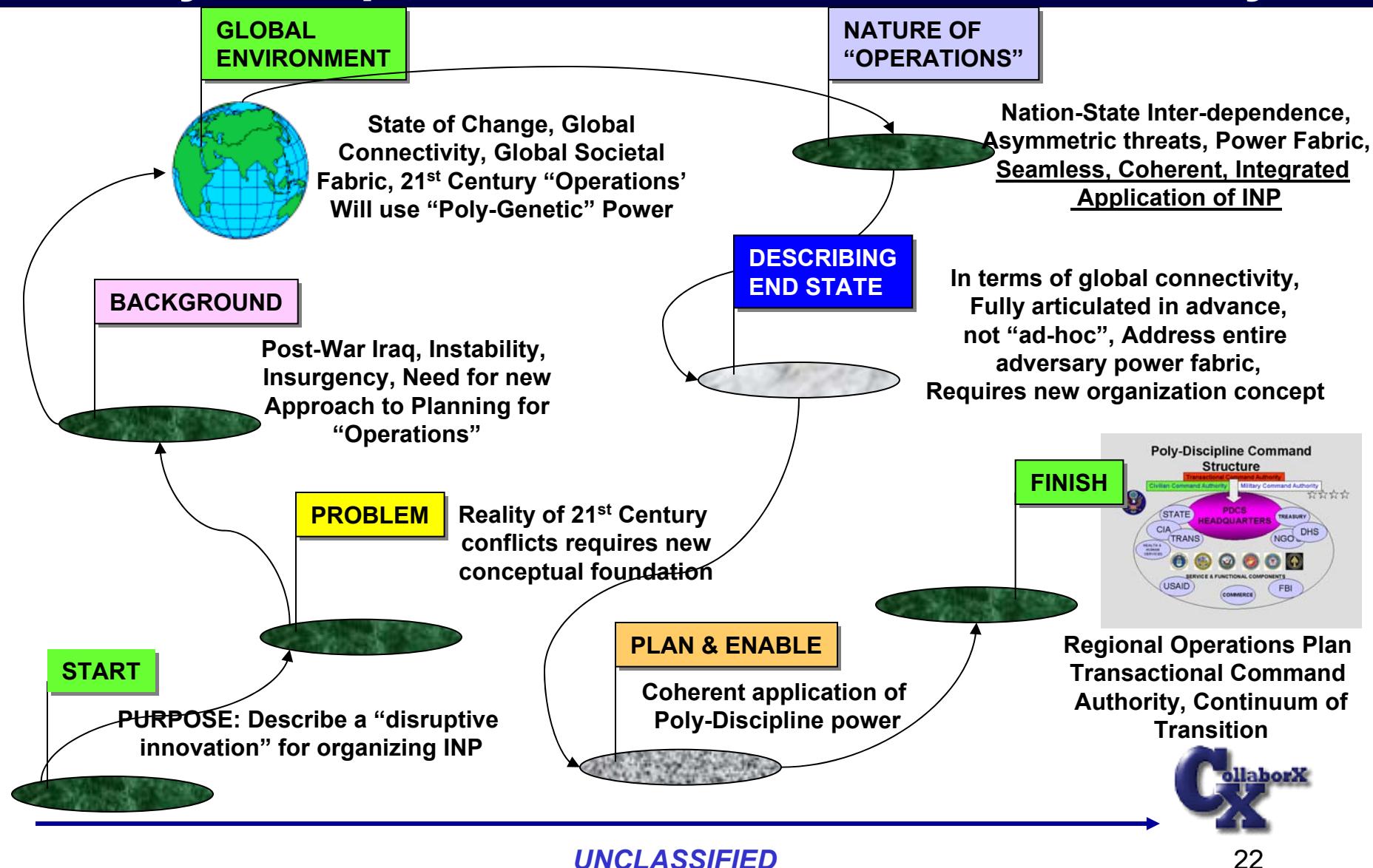
Keith J. Costa, Inside the Pentagon, [Pentagon Officials Draft Joint Operating Concepts for Future Missions, \(Ref USJFCOM\)](#), Jul 03.

The PDCS described in this presentation provides a structure and method to do that.



Summary

The Poly-Discipline Command Structure Pathway



Way Ahead

Continue exploration of the PDCS concept through Joint Experimentation as it relates to emerging operating concepts, using PDCS as a new core capability in a simulated crisis or conflict scenario.

UNCLASSIFIED



23



Questions

UNCLASSIFIED



24



*Bringing People, Processes
and Technology Together*

Mr. Samuel R. Oppelaar Jr.
CollaborX, Incorporated
1755 Telstar Drive, Suite 120
Colorado Springs, CO 80920

(719) 567-8825 (Office)
(719) 930-8487 (Cell)

sam.oppelaar ctr@mda.mil
oppelaars@collaborx.com



UNCLASSIFIED

25

Back-up Slides

UNCLASSIFIED



26

PDCS Command Authorities Descriptions

Transactional Command Authority

TCA describes the authority of the senior United States military or civilian official designated by the President to exercise command over all US instruments of national power made available to the Regional Command. TCA grants planning, coordinating, and operational authority to exercise and employ instruments of national power in the form of Poly-Discipline Force Packages assigned to the regional command. TCA is transitory and will be assigned to either the Military Command Authority (MCA) or Civilian Command Authority (CCA) according to the geo-political and military situation. In general terms, TCA would rest with the CCA in peacetime and be assigned to the MCA as crisis develops and military intervention is needed.

PDCS Command Authorities Descriptions

Military Command Authority

MCA describes the authority of the regional military commander to organize and employ joint military forces assigned to the Regional Command to conduct and support operations. The regional military commander maintains MCA. MCA is the authority granted by law to conduct military operations as directed by the President. The MCA assumes Transactional Command Authority by direction of the President of the United States.

UNCLASSIFIED



28

PDCS Command Authorities Descriptions

Civilian Command Authority

CCA describes the authority of the regional civilian counterpart of the military commander to plan, organize, and apply all non-military instruments of national power made available to the Regional Command in the form of Poly-Discipline Force Packages. The CCA maintains command authority over all non-military force capabilities assigned to the Regional Command. The CCA assumes Transactional Command Authority by direction of the President of the United States.